

ORIGINAL

BEFORE THE  
Federal Communications Commission  
WASHINGTON, D.C.

In the Matter of )  
 )  
Amendment of the Commission's )  
Rules And Policies to Increase )  
Subscribership and Usage of the )  
Public Switched Network )

CC Docket No. 95-111

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**COMMENTS OF AMSC SUBSIDIARY CORPORATION**

AMSC Subsidiary Corporation ("AMSC"), the licensee of the U.S. Mobile Satellite Service system, hereby comments on the Notice of Proposed Rulemaking ("NPRM") issued in the above-referenced proceeding.<sup>1/</sup> In the NPRM, the Commission seeks comments on various questions relating to its universal service policies. In particular, the Commission solicits suggestions regarding opportunities to increase connection to the public switched telecommunications network ("PSTN"). NPRM para. 2. In addition, the Commission invites comments on methods to augment subscribership in under-served areas. NPRM para. 9. Enhancing subscribership levels in a cost-effective manner represents the Commission's explicit objective in this proceeding. Id. at para. 6.

AMSC recommends that the Commission permit local exchange carriers to recover from the Universal Service Fund ("USF") a portion of the cost of providing Mobile Satellite Service (hereinafter "MSS") in areas not served by terrestrial phone services. In many sparsely-settled areas, MSS is likely to provide the most cost-effective, and often the only viable, option for basic

<sup>1/</sup> Notice of Proposed Rulemaking and Notice of Inquiry, CC Docket No. 80-286, FCC 95-282 (July 13, 1995).

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telephone service. AMSC believes that such allocation of assistance will promote increased subscribership and usage of the public switched network in a cost-effective manner.

## **BACKGROUND**

Mobile Satellite Service will be the first truly ubiquitous telecommunications service available in the United States. For the first time, people living, working or traveling in rural and remote areas too sparsely populated to be served by terrestrial technologies will have access to advanced telecommunications services. The Commission awarded AMSC a license in May 1989 to construct, launch and operate the space segment for what is to be the sole MSS system to provide U.S. service in the L-band. See Memorandum Opinion, Order and Authorization, Gen. Docket 84-1234, 4 FCC Rcd 6041 (1989); Final Decision on Remand, 7 FCC Rcd 266 (1992); aff'd sub nom. Aeronautical Radio, Inc. v. FCC, 983 F.2d 275 (D.C. Cir. 1993). The Commission granted the license based on a proven demand for MSS by hundreds of thousands of domestic customers. See Notice of Proposed Rulemaking in RM-4247 ("1985 NPRM"), 50 Fed. Reg. 8149, para. 5 (1985).

Since the Commission granted AMSC its authorizations in 1989, the company has been able to secure \$650 million in capital and successfully develop and deploy the facilities needed to provide nationwide mobile service via satellite. AMSC launched its first satellite on April 7, 1995 from Cape Canaveral, Florida. AMSC-1 is the most powerful mobile communications satellite ever constructed and launched, nearly six times more powerful than the satellites that Inmarsat plans to launch later this year.<sup>2/</sup> Full commercial operations of AMSC's system are

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<sup>2/</sup> A Canadian satellite that is virtually identical to that of AMSC is also scheduled for launch within a year.

expected to begin this year. AMSC will provide a full range of land, maritime and aeronautical mobile satellite services, including voice, data and facsimile, throughout the United States, Puerto Rico, the U.S. Virgin Islands, and coastal areas up to 200 miles offshore.<sup>3/</sup>

Though primarily intended as a mobile service, the Commission has always expected that MSS also would be used to provide fixed telephone service to households without any telephone service.<sup>4/</sup> Fixed telephone service will be provided by installing a high-gain L-band transceiver at the user's location, with a standard interface and handset. All outbound calls (from the customer) will be routed through the satellite to the AMSC earth station in Reston, Virginia, and into the public switched telephone network. Inbound calls (to the customer) will be routed through the PSTN to the AMSC earth station, to the satellite, and terminate at the customer's location. If a LEC has sufficient MSS traffic volume, it may choose to install a local gateway earth station as an alternative to routing calls through the AMSC earth station.

AMSC estimates that the subscriber terminal will retail for approximately \$2,300. The expected retail rate for fixed telephone service will be \$25 per month for access, plus

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<sup>3/</sup> On March 13, 1995, the Commission authorized AMSC to construct and operate up to 200,000 voice terminals ("METs"). 200,000 METs Blanket, File No. 2823-DSE-P/L-93, DA-95-482, released March 13, 1995. On August 25, 1995, the Commission granted AMSC two modifications of this authority. The first of these modifications allows AMSC to change the overall emission mask for the 200,00 METs, and the specified gain of previously authorized medium-gain azimuth-directive antenna. The second modification gave AMSC the authority to include up to 300 METs with multiple channel capacity, employing super high-gain antennas.

<sup>4/</sup> Notice of Proposed Rulemaking ("NPRM"), 50 Fed Reg. 8149 (Feb. 28, 1985), para. 4; AMSC Authorization Order, para. 42. In the NPRM, the Commission cited one estimate that there were as many as 1.6 million households in rural America without access to basic telephone service. NPRM, para. 4. AMSC's own research indicates that today the number of unserved households may be as high as one million.

approximately \$.90 cents per minute. LECs with a sufficiently large MSS market may choose to acquire equipment and obtain long-term leases of channel capacity at discounted rates.

The USF was adopted in 1984 by the Commission to provide assistance to LECs with higher than average loop costs, in order to promote universally available telephone service at affordable rates. Notice of Proposed Rulemaking and Notice of Inquiry, CC Docket No. 80-286, FCC 95-282 (July 13, 1995) at para. 2. Specifically, the Commission, through the USF, has directed support to LECs serving high cost areas to seek to insure that these areas are not otherwise ignored in the provision of phone service.

In the NPRM, the Commission seeks comments on numerous issues concerning ways to increase subscribership and usage of the public switched network, including extending telephone service to unserved areas. NPRM para. 40. It solicits ideas, “about how the market can work even better to reduce obstacles that prevent those who want phone service from being able to afford it and to help those with service maintain it. Id. at para. 6. The Commission notes that in certain remote locations, geographically rugged terrain or areas of low population density may lack telephone service as a result of the high cost of constructing wire facilities to customer premises. Id. Further, the Commission observes that population size often reduces the financial incentive of carriers to provide telephone service: “In some cases, populations are so small that it may not be economically feasible to provide switched service to them.” Id.

To address this problem, the Commission suggests looking to new technologies: “To some extent wireless technology may offer a less costly means of extending service to these areas.” Id. at para. 41. Thus, the Commission seeks comments describing “newer wireless technologies that may also serve as reasonable surrogates for traditional wire loops.” NPRM para. 41.

## DISCUSSION

In order to increase subscribership, particularly in areas not served by terrestrial technologies, AMSC recommends that LECs be permitted to use the USF to recover a portion of the cost of providing MSS. Specifically, AMSC suggests that MSS subscriber equipment costs be recoverable from the USF.<sup>5/</sup> MSS will often be the least expensive alternative for providing basic telephone service to remote households. By making MSS more readily affordable to the people that live outside of the coverage of any telephone company, AMSC will further the Commission's goal of fostering universal telephone service, in the most efficient and least expensive way possible. MSS represents a targeted solution to meet the needs of consumers currently without basic phone service in high cost areas. See NPRM at para. 3. By so allocating USF support, the Commission will demonstrate its amenability to new technologies, assuring that USF assistance does not unduly favor one competitor or technology over another.

MSS represents a wireless technology which can serve as an efficient, feasible surrogate for traditional wire loops. See NPRM para. 41. Thus, promoting MSS by allowing USF distribution in the manner that AMSC recommends herein can best serve the Commission's goals of realizing universal service for such high cost areas currently without phone service. Accordingly, AMSC limits these comments to a discussion of reform of the current USF distribution mechanism, which can most expediently increase subscribership in under-served areas.<sup>6/</sup>

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<sup>5/</sup> AMSC also recommends that USF funds be recoverable by LECs who enter into long-term leases for sufficient satellite capacity to provide efficient trunking.

<sup>6/</sup> AMSC has twice previously filed similar comments concerning universal service. See  
(continued...)

What AMSC proposes also stands consistent with the policy goals enumerated by the Commission in its Notice of Proposed Rulemaking and Notice of Inquiry regarding amendment of Part 36 of the Commission's rules. CC Docket No. 80-286, FCC 95-282 (July 13, 1995) at para. 2. There, the Commission asked commenting parties, in pertinent part, to provide suggestions for reform, ". . . so that support is given only to those service providers or users who need assistance to maintain local service," encouraging efficient investment and operation on a competitive and technologically-neutral basis, maximizing connection to the nationwide telecommunications network. Id. at 6-7. AMSC believes that the reform suggested herein will best promote increased subscribership and usage of the public switched network, while fostering the most cost-effective, and often the only viable option for provision of basic telephone service in many areas currently without service, consistent with the Commission's stated goals in both this NPRM, and that rulemaking concerning the USF.<sup>7/</sup>

As indicated in the NPRM, the Commission has previously stated its intention to treat all basic exchange service the same with regard to high cost assistance, whether the service is provided by radio or wire. NPRM at para. 41. In 1988, the FCC allowed LECs that provided BETRS as a substitute for local loop service in rural areas -- to be eligible for high-cost assistance.<sup>8/</sup> Specifically, the FCC decided that the BETRS subscriber unit and the cost of

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<sup>6/</sup>(...continued)

Comments of AMSC Subsidiary Corporation, FCC Docket No. 80-286 (October 28, 1994); see also Comments of AMSC Subsidiary Corporation, NTIA Docket No. 940955-4255 (December 14, 1994).

<sup>7/</sup> CC Docket No. 80-286, FCC 95-282, supra.

<sup>8/</sup> Report and Order, 3 FCC Rcd 214 (1988), as cited in NPRM at Note 59 and accompanying text. BETRS uses radio frequencies to connect subscribers at fixed locations and LEC central offices.

installing the electrical outlet associated with the subscriber unit should be treated as regulated network equipment owned by the LEC, and that USF funds could be used to recoup both of these costs, in order to further the goal of universal service.<sup>9/</sup>

AMSC believes that, as with BETRS, MSS also represents a more efficient (and in some case the only) means of providing telephone service to many unserved areas. The BETRS subscriber unit (the individual pieces of equipment necessary to use the radio service) is similar to the equipment that will be used with the MSS system.<sup>10/</sup>

A July 1994 study by Hatfield Associates, Inc. demonstrates that in areas of low population density, the cost of providing service using wireless technology is less than the cost of providing these services using wireline technology.<sup>11/</sup> Thus, it is likely that permitting the USF to subsidize MSS costs will in the long run reduce the cost of the Universal Service Fund, while at the same time adding people to the network in a quicker, more efficient manner, consistent with the Commission's underlying goals of increasing subscribership and usage of the public switched network, and developing more precise targeting of USF support.

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<sup>9/</sup> Memorandum Opinion and Order, 4 FCC Rcd 2224 (1989).

<sup>10/</sup> In the BETRS case, there was a question whether the subscriber unit should be classified as unregulated customer premises equipment (and ineligible for USF support) or regulated network equipment. The Commission decided that the overriding policy supporting universal service was justification for treating the subscriber unit as eligible for USF support. The Commission should act similarly with respect to the MSS subscriber terminal.

<sup>11/</sup> The Cost of Basic Universal Service, prepared for MCI Communications Corporation by Hatfield Associates, Inc. (July 1994), filed with the Comments of MCI Communications Corporation, FCC Docket No. 80-286 (October 28, 1994).

## CONCLUSION

The preservation and advancement of universal service are two of the most significant goals of federal communications policy. The Commission can further its goals of increased subscribership and usage of the public switched network by encouraging the use of new, more efficient technologies such as mobile satellite service to serve the many people who live without phone service in rural or remote areas of the United States. Though USF support has typically gone to LECs using traditional wireline loops, precedent exists for giving high cost assistance to providers employing wireless services. Accordingly, AMSC proposes that LECs which use MSS to provide telephone service where none is currently offered be permitted to receive USF assistance to recover a portion of their cost. Such a policy will enhance subscribership by making telephone service available to more people, while, at the same time, rendering the Commission's high-cost assistance program more cost-effective.

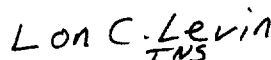
Respectfully submitted,

**AMSC SUBSIDIARY CORPORATION**



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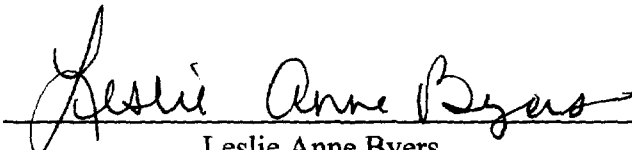


**CERTIFICATE OF SERVICE**

I, Leslie Anne Byers, do hereby certify that I have this 27th day of September, 1995,  
mailed by first-class United States mail, postage prepaid, copies of the foregoing "**Comments of  
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